

AN ANNOTATED LIST OF THE CURVIPALPIA (TRICHOPTERA) OF ALABAMA¹

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ABSTRACT: Distributional records for 93 species of caddisflies in the infraorder Curvivalpia from Alabama are presented, along with information on seasonal occurrence, habitat and relative abundance. Hydropsychidae is best represented (47 species), followed by Polycentropodidae (32 species), Philopotamidae (11 species) and Psychomyiidae (3 species). Of the species reported, 74 represent new state records.

The caddisfly fauna of the southeastern United States has received considerable attention in recent years and a diverse fauna of the infraorder Curvivalpia (*sensu* Weaver, 1984; Weaver and Morse, 1986) (=superfamily Hydropsychoidea of Ross, 1967 and Schmid, 1980) is now known. Etnier and Schuster (1979) reported 91 species of Curvivalpia in Tennessee, while in North and South Carolina, Unzicker *et al.* (1982) compiled 107 species. However, in Mississippi only 46 species were reported by Lago *et al.* (1982). In the entire southeast, about 130 species are likely to occur (Morse, personal communication). Despite these studies in neighboring states, the caddisfly fauna of Alabama is just beginning to be understood. Harris (1986) provided a checklist of the Hydroptilidae of the state. The present study continues the description of the Alabama fauna by listing the known Philopotamoidea (Philopotamidae) and Hydropsychoidea (Polycentropodidae, Psychomyiidae and Hydropsychidae) of the state.

In 1981, extensive collecting, primarily using black-light traps, was initiated in the state. This effort has resulted in the collection of 93 species of Curvivalpia, nine of which were described during the course of the study (Lago and Harris, 1983, 1985, 1987; Schuster and Hamilton, 1984; Gordon *et al.*, 1986). The richness of the Curvivalpia fauna in Alabama is indicative of the range of physiographic regions represented in the state. These include the East Gulf Coastal Plain, Piedmont Plateau, Valley and Ridge, and Appalachian Plateau, including the Highland Rim Plateau and Cumberland Plateau subregions (Sapp and Emplaincourt, 1975).

Annotated List of the Curvivalpia of Alabama

In the following checklist of the 93 species of Curvivalpia known to

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occur in Alabama, each species is followed by numerically coded county records. These counties and their location, within the state and with a physiographic province, are depicted in Figure 1. General information on distribution, habitat, abundance and dates of collection are also included. Numbers presented for specimens examined generally refers to males only. Detailed locality and collection information will be provided in an overall summary of the caddisfly fauna of the state, to be published later. This checklist represents over 600 collections made between 1981 and 1986. Specimens are deposited in the insect collections of the Departments of Biology at the University of Alabama and the University of Mississippi.

PHILOPOTAMOIDEA

Philopotamidae

- Chimarra augusta* Morse. 17. Rare in state, in Piedmont Plateau. May-July. Specimens examined - 9.
- C. aterrima* Hagen. 1, 5, 8-12, 14-22, 25-29, 31-34, 39, 42, 45, 51, 53, 58, 65, 66. Widespread and common in state. March-October. Specimens examined - 826.
- C. falcuata* Lago & Harris. 64-67. Rare, restricted to lower Coastal Plain. May. Specimens examined - 5.
- C. florida* Ross. 36, 42, 51-53, 64-67. Common in small Coastal Plain streams. March - September. Specimens examined - 1743.
- C. moselyi* (Denning). 11, 12, 19-25, 31, 32, 34-36, 39, 41, 45, 53-55, 60, 63-67. Widespread in state, but never collected in large numbers. April - October. Specimens examined - 435.
- C. obscura* (Walker). 1-6, 8-22, 25-27, 31-34, 38-41, 45, 49, 50, 53, 54, 58, 66. Widespread and common in state. April - October. Specimens examined - 4148.
- C. parasocia* Lago & Harris. 9-11, 20, 24-26, 34, 35, 39, 41, 67. Uncommon, primarily in streams of western Alabama. April - August. Specimens examined - 155.
- Dolophilodes distinctus* (Walker). 1, 6, 8, 10-12, 14, 17, 18, 25, 28, 29, 45. Uncommon in small streams of northern Alabama (above fall line). February, May-October. Specimens examined - 53.
- D. major* (Banks). 17. Collected from a single headwater stream in the Piedmont Plateau. May. Specimens examined - 3.
- Wormaldia moesta* (Banks). 5, 8, 10, 17, 18, 20, 22, 25, 28, 51, 67. Primarily collected in small, often intermittent, streams throughout the state. February, April - June, October. Specimens examined - 45.
- W. shawnee* (Ross). 5. Only state record, the Little River in the southern Appalachians. May. Specimens examined - 5.

HYDROPSYCHOIDEA

Psychomyiidae

- Lype diversa* (Banks). 1-6, 8-12, 14-20, 22-27, 29, 31, 36, 39, 42, 51, 52, 64-67. Widespread, but uncommon in state. March - October. Specimens examined - 328.
- Psychomyia flavida* Hagen. 1, 5, 14, 15, 17-21, 25, 26, 28, 29, 31, 32, 34, 36, 41, 51, 53, 54, 63, 64. Widespread and common in state. April - October. Specimens examined - 517.

P. nomada (Ross). 1. Only known from a single stream in the Highland Rim Plateau. June. Specimens examined - 14.

Polycentropodidae

- Cernotina calcea* Ross. 1, 3, 4, 8, 9, 10, 11, 13, 16, 20, 25, 26, 31, 34, 36, 38-41, 43, 45, 49, 50, 52-55, 58, 60, 63 - 67. Widespread and common in state, most abundant in large Coastal Plain rivers. May, September. Specimens examined - 927.
- C. spicata* Ross. 5, 6, 9, 11-14, 18, 20, 21, 24-26, 31, 32, 34, 35, 39, 40, 43, 45, 58, 64-67. Widespread and common in state, most numerous in large Coastal Plain rivers. April - September. Specimens examined - 440.
- C. truncata* Ross. 58, 64, 65, 67. Primarily collected in Coastal Plain ponds and lakes. April - June. Specimens examined - 16.
- Cynnellus fraternus* (Banks). 1-6, 9-11, 13-20, 23-26, 33-43, 45, 49, 50, 52-54, 58, 60, 63-67. Widespread and common in state, particularly in large rivers and reservoirs. April - October. Specimens examined - 2800.
- Neureclipsis crepuscularis* (Walker). 1, 3-5, 9, 11, 13, 14, 16, 18, 20, 22, 24, 25, 27, 31, 33-41, 49-51, 53, 55, 63-67. Widespread and common in state. March - October. Specimens examined - 589.
- N. melco* Ross. 12, 21, 23, 25, 34-36, 52, 53, 66, 67. Most common in rivers and streams of Coastal Plain. March - September. Specimens examined - 559.
- Nyctophylax affinis* (Banks). 1, 4-6, 8-12, 14, 16-18, 21, 22, 25-29, 34-36, 38, 39, 41, 45, 51-53, 58, 63, 64, 66, 67. Widespread in state, but never collected in large numbers. April - October. Specimens examined - 219.
- N. banksi* Morse. 4, 5, 8-11, 13, 14, 17, 18, 20, 25, 26, 53, 66. Widespread in state, but uncommon. May - October. Specimens examined - 135.
- N. celta* Denning. 1, 5, 14, 16, 17, 20, 25, 31, 32, 34, 35, 41, 54, 64, 66, 67. Widespread and common in state. May - October. Specimens examined - 1890.
- N. denningi* Morse. 1, 2, 6, 8-15, 17, 18, 20, 22, 23, 25, 26, 28, 29, 31, 32, 39, 45, 50. Widespread in state but most common above the fall line. April - September. Specimens examined - 1458.
- N. moesta* Banks. 1, 4, 5, 8, 14, 19, 20, 25. Uncommon, collected only in northern Alabama. April - June, September, October. Specimens examined - 225.
- N. morsei* Lago & Harris. 66, 67. Rare, primarily found in small Coastal Plain streams. April - June. Specimens examined - 49.
- N. serratus* Lago & Harris. 1, 3, 8-12, 14, 17, 22, 23, 25, 31, 36-40, 42, 45, 51-53, 65-67. Widespread in state, but most abundant in small Coastal Plain streams. April - September. Specimens examined - 218.
- Phylocentropus carolinus* Carpenter. 1, 9, 17, 24, 25, 27, 28, 31, 32, 34, 39, 51, 53-55, 67. Widespread in small streams of state but never collected in large numbers. April - September. Specimens examined - 141.
- P. lucidus* (Hagen). 10, 12, 17, 22, 23, 25, 31, 36, 51, 60, 66. Uncommon, collected in small streams throughout the state. April - September. Specimens examined - 31.
- P. harrisi* Schuster & Hamilton. 51, 66. Only known from two small streams of the Coastal Plain. April, May. Specimens examined - 2.
- P. placidus* (Banks). 4, 17-20, 22-28, 31, 35, 37, 39, 42, 45, 51-55, 58, 60, 65-67. Most widespread and common *Phylocentropus* in state. March - November. Specimens examined - 181.
- Polycentropus barri* Ross & Yamamoto. 31. Only records from the Tallapoosa River and one of its tributaries. May. Specimens examined - 2.
- P. blicklei* Ross & Yamamoto. 2, 5, 6, 10-12, 17-19, 23, 25, 66, 67. Widespread in state, but most common in northern Alabama; never collected in large numbers. March, May, June, September. Specimens examined - 42.

- P. carlsoni* Morse. 18. Only known from two small headwater streams of the Valley and Ridge. June. Specimens examined - 2.
- P. centralis* Banks. 1, 2, 5, 6, 9-11, 15. Collected at scattered localities in north Alabama, but most abundant in the Highland Rim Plateau. May, June. Specimens examined - 144.
- P. cinereus* Hagen. 1-3, 5, 6, 8-12, 14, 16-18, 20, 22, 23, 25, 27, 31, 32, 34, 39, 50, 51, 53, 65-67. Widespread and common in state. April - June, September. Specimens examined - 292.
- P. clinei* (Milne). 52, 66, 67. Rare, primarily in small Coastal Plain streams. March - May. Specimens examined - 6.
- P. confusus* Hagen. 1, 2, 5, 6, 8, 10-15, 17-22, 25, 28, 29, 31, 34, 39, 45, 51, 53. Widespread and common in state. April - October. Specimens examined - 1028.
- P. crassicornis* Walker. 10, 20, 22, 25, 39, 45, 51, 53, 66, 67. Widespread, but uncommon in state. March - June. Specimens examined - 43.
- P. elarus* Ross. 4, 5. Only records from two small streams in the Cumberland Plateau. June. Specimens examined - 2.
- P. floridensis* Lago & Harris. 66. Rare, in small Coastal Plain streams. April - May. Specimens examined - 8.
- P. nascotius* Ross. 67. Rare, in small Coastal Plain streams. June, August. Specimens examined - 4.
- P. n. sp.* (nr. *chelatus*). 21, 22, 25. Most common in small headwater and intermittent streams of the Cumberland Plateau. March - May. Specimens examined - 17.
- P. n. sp.* (nr. *elarus*). 6, 8, 10, 14, 20, 22, 25, 39. Primarily collected in small streams of northern Alabama. May, June. Specimens examined - 46.
- P. pentus* Ross. 25. Only record from a small intermittent stream of the Cumberland Plateau. April. Specimens examined - 1.
- P. rickeri* Yamamoto. 11. Only record from a small stream of the Cumberland Plateau. June. Specimens examined - 1.

Hydropsychidae

- Cheumatopsyche bibbensis* Gordon, Harris & Lago. 34. Known only from the type locality on the Cahaba River. October. Specimens examined - 1.
- C. burksi* Ross. 1, 6, 9, 12, 21, 24, 25, 31, 32, 35, 36, 52, 58, 66, 67. Widespread, but uncommon in state. May - August. Specimens examined - 49.
- C. cahaba* Gordon, Harris & Lago. 20. Known only from the type locality near the headwaters of the Cahaba River. July. Specimens examined - 1.
- C. campyla* Ross. 1, 3, 4, 9, 10, 13, 14, 16-18, 20, 25, 29, 31, 32, 34, 36-38, 40, 43, 50, 64. Widespread and common in state. April - October. Specimens examined - 917.
- C. edista* Gordon. 23-25, 33, 34, 39, 40, 50, 51, 55, 58, 60, 64. Widespread and common in Coastal Plain streams. April - October. Specimens examined - 1178.
- C. ela* Denning. 4, 17, 20, 25, 26, 34, 40, 41, 49, 50. Collected at scattered localities throughout the state but most abundant in Coastal Plain streams. April - October. Specimens examined - 904.
- C. geora* Denning. 5, 6, 8, 10, 11, 13, 15, 17, 18, 20, 25, 26, 28, 29, 31, 32, 34, 39, 41, 45, 53, 64. Widespread in state, but most common above the fall line. April - October. Specimens examined - 1956.
- C. gracilis* (Banks) 8, 20, 25, 34. A common species in small streams of the Cumberland Plateau. May - September. Specimens examined - 126.
- C. harwoodi* Denning. 1, 17, 18, 20, 25, 31, 32, 39. Primarily in small streams of northern Alabama; uncommon. May - July. Specimens examined - 22.
- C. helma* Ross. 5, 28. Recorded from the Valley and Ridge and Piedmont Plateau. May, June. Specimens examined - 4.

- C. kinlockensis* Gordon, Harris & Lago. 8. Known only from the type locality in the Cumberland Plateau. May. Specimens examined - 4.
- C. minuscula* (Banks). 20, 25, 26, 31, 32, 34, 39, 45, 54, 60, 63-65. A common species along fall line and throughout the Coastal Plain. April - October. Specimens examined - 3812.
- C. oxa* Ross. 1, 2, 5, 6, 8-10, 14-20, 25-27, 32, 34. Common in the Highland Rim Plateau and lower Appalachians. April - October. Specimens examined - 1318.
- C. pasella* Ross. 1, 3-6, 8-22, 24-26, 29, 31, 32, 34, 36-41, 49, 51-54, 58, 60, 63-67. Widespread and common in state. April - October. Specimens examined - 6666.
- C. petersi* Ross, Morse & Gordon. 52, 53, 64, 66, 67. Common in lower Coastal Plain streams. April - September. Specimens examined - 554.
- C. pettiti* (Banks). 1-6, 8-22, 24-27, 29, 31-40, 45, 49-53, 58, 60, 64-67. Widespread and common in state. April - October, February. Specimens examined - 1688.
- C. pinaca* Ross. 5, 8, 11, 12, 15, 17, 18, 21-25, 27, 29, 31-33, 36, 39, 42, 45, 51-53, 58, 60, 64-67. Widespread and common in state. March - September. Specimens examined - 1239.
- C. sordida* (Hagen). 33-35, 39, 41, 42, 43, 45, 58. Collected in northern portion of Coastal Plain; uncommon. April - June, September. Specimens examined - 95.
- C. virginica* Denning. 2, 25, 33, 36, 39, 42, 51, 52, 64, 66, 67. Widespread, but uncommon on Coastal Plain. March - August. Specimens examined - 58.
- Dipterotrana modesta* Banks. 1, 2, 6, 10, 12, 14, 17, 18, 23, 25, 27, 28, 35, 39, 45, 48, 51, 58, 65, 66. Widespread in state, but never collected in large numbers. April - October. Specimens examined - 169.
- Homoplectra doringa* (Milne). 25. Collected in intermittent streams of the Cumberland Plateau. April - March. Specimens examined - 21.
- Hydropsyche alvata* Denning. 10, 25, 29, 33-35, 38, 39, 41, 45, 52, 60, 63-65. Most commonly collected in Coastal Plain streams. April - August. Specimens examined - 986.
- H. betteni* Ross. 1-3, 5, 6, 8, 10, 11, 14, 15, 17-20, 22, 25-27, 29, 31, 34, 36, 39, 41, 42, 45, 49-51. Widespread in state, but never collected in large numbers. April - October. Specimens examined - 424.
- H. decalda* Ross. 66. Only records from lower Coastal Plain streams. May, August. Specimens examined - 4.
- H. demora* Ross. 17, 31, 32. Rare, records from small Piedmont streams. May, June. Specimens examined - 9.
- H. depravata* Hagen. 1, 4, 5, 14-16, 18-20, 25, 26, 34. Most frequently collected in lower Appalachians. April - October. Specimens examined - 296.
- H. dicantha* Ross. 5, 6, 18, 25-28, 32, 34. Uncommon, collected at scattered north Alabama localities. April - August. Specimens examined - 123.
- H. elissoma* Ross. 22-25, 35, 36, 42, 52, 64-67. Uncommon, at numerous Coastal Plain localities. March - August. Specimens examined - 216.
- H. fattigi* Ross. 17, 31. Rare, in Piedmont streams. May. Specimens examined - 10.
- H. frisoni* Ross. 4, 13, 14, 20, 24-26, 34, 37, 45. Most common in northern Alabama rivers and large streams. April - October. Specimens examined - 1041.
- H. hageni* Banks. 20, 25, 26, 34. Common in central Alabama rivers and large streams. April - October. Specimens examined - 1128.
- H. incommoda* Hagen. 20, 27, 34, 63-65. Collected at scattered localities in state, but most common in large streams of lower Coastal Plain. April - September. Specimens examined - 1242.
- H. mississippiensis* Flint. 2, 5, 10-12, 15-21, 23-27, 29, 32-36, 39, 41, 44, 45, 49, 51-55, 58, 60, 63-67. Widespread and common in state. March - October. Specimens examined - 2400.
- H. orris* Ross. 2-4, 8-10, 18, 20, 22, 24-26, 33-37, 39-42, 45, 48-51, 53, 54, 64-67. Widespread and common in state. March - November. Specimens examined - 2629.

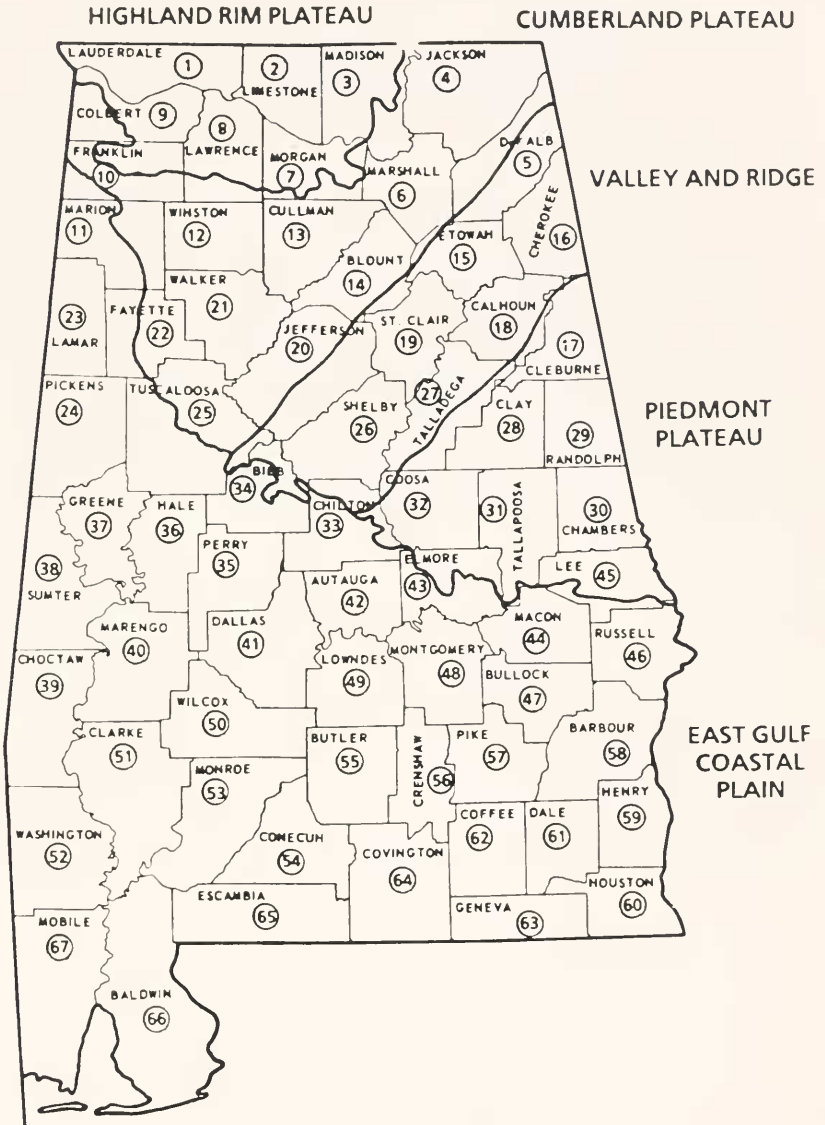
- H. phalerata* Hagen. 11, 29, 32. Rarely collected in state. May - July. Specimens examined - 4.
- H. rossi* Flint, Voshell & Parker. 1, 2, 5, 9-11, 13, 14, 16, 18, 20, 22, 23-26, 33-36, 40, 41, 45, 50, 60, 63-65, 67. Widespread in state but never collected in large numbers. March - October. Specimens examined - 518.
- H. rotosa* Ross. 1, 2, 3. Only collected in Highland Rim Plateau, rare. June. Specimens examined - 9.
- H. scalaris* Hagen. 16, 18, 34. Rare, in Valley and Ridge. May, September. Specimens examined - 7.
- H. simulans* Ross. 18. Only record from a stream in the southern Appalachians. September. Specimens examined - 1.
- H. venularis* Banks. 11, 12, 17, 18, 20, 21, 26, 29, 31, 32, 34, 45, 54. Primarily collected above the fall line, but never in large numbers. April - October. Specimens examined - 361.
- H. n. sp. (scalaris group)* 3. Known from two rivers of the Highland Rim Plateau. June. Specimens examined - 40.
- H. (Ceratomyche) cheilonis* (Ross). 1, 14, 16, 18-20, 25, 27, 35. Collected in north-central Alabama. April - October. Specimens examined - 415.
- H. (C.) sparna* (Ross). 1, 2, 5, 6, 8-11, 13-20, 22, 25, 27-29, 31-34, 36, 45, 51, 53, 60, 64, 66. Widespread and common in state. April - October. Specimens examined - 911.
- Macrostemum carolina* (Banks). 1, 5, 6, 9-12, 22-26, 33-35, 41, 43-45, 49, 50, 52-54, 60, 63-67. Widespread and common in state. April - September. Specimens examined - 1312.
- M. transversum* (Walker). 24, 33, 35, 45, 48. Collected in large rivers along the fall line; uncommon. April - June. Specimens examined - 59.
- M. zebratum* (Hagen). 5, 31, 34, 54. Collected in small rivers at several scattered localities; most numerous in the Sepulga River on the Coastal Plain. May, June. Specimens examined - 225.
- Potamyia flava* (Hagen). 25, 34, 35, 40, 41, 49, 51, 53, 64, 66, 67. Widespread and common in Coastal Plain rivers and large streams. April - October. Specimens examined - 1184.

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